

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
27 September 2001 (27.09.2001)

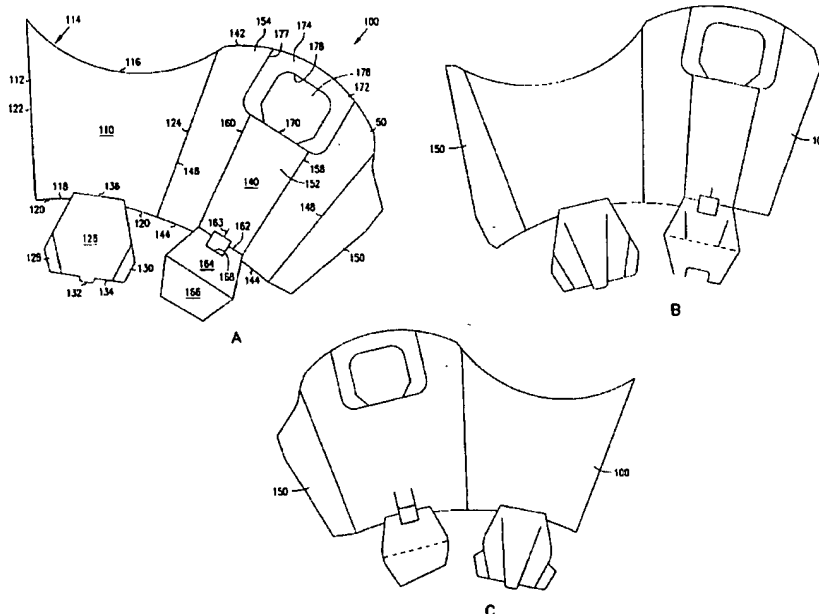
PCT

(10) International Publication Number  
**WO 01/70582 A2**

- (51) International Patent Classification<sup>7</sup>: **B65D** (74) Agent: **VIKSINNS, Ann, S.**; Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938, Minneapolis, MN 55402 (US).
- (21) International Application Number: PCT/US01/09283
- (22) International Filing Date: 21 March 2001 (21.03.2001) (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 09/528,943 21 March 2000 (21.03.2000) US (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **ROCK-TENN COMPANY** [US/US]; 504 Thrasher Street, Norcross, GA 30071 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **ROCCAFORTE, Harry, I.** [US/US]; Apartment 1701, 2800 North Lake Shore Drive, Chicago, IL 60657 (US).
- Published:  
— *without international search report and to be republished upon receipt of that report*

[Continued on next page]

(54) Title: **FOOD CONTAINER FOR USE WITH CUP HOLDER AND A BLANK THEREFOR**



(57) Abstract: A food container has a circular base which is insertable into a cup holder. The food container is optionally formed of a plurality of paperboard panels. The food container includes a fold-down structure for supporting a condiment container therein, where a user has simultaneous access to contents of the food container and the condiment container. A blank for forming a circular base includes a front panel, a back panel, and bottom panels coupled to each.

WO 01/70582 A2

**WO 01/70582 A2**



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**FOOD CONTAINER FOR USE WITH CUP HOLDER  
AND A BLANK THEREFOR**

**Field of the Invention**

5           The present invention relates generally to containers for holding food therein. More particularly, it pertains to a food container for use with a cup holder.

**Background of the Invention**

10           The fast food industry has developed the practice of merchandising foods, such as french fries, in disposable containers having a semi-rigid structure, formable in economic fashion from sheet materials. The containers for serving french fries are generally box-shaped with an open top, such that the consumer has access to the fries without having to flip open a lid, for instance, the food container shown in U.S. Patent No. 5,720,429 issued February 24, 1998  
15 to Cordle. It is desirable to provide a condiment or sauce with the principal food product carried by the container. For example, containers of ketchup are frequently used with french fries. Often the condiments are provided in separately packaged materials.

20           People often consume fast food such as french fries in their car, for instance, on long trips or while running errands or driving around town. To consume the food items the consumer must either hold the container, or can opt to set the container down. When driving in a car, the available options on to which to set the container are limited. For instance, the consumer may place the container on the passenger seat. However, this is undesirable if a passenger is  
25 seated in the passenger seat. Further, since the food contained in an unstable open container, the container falls on its side and spills the contents of the container on, for example, the seat on which the container is placed. Alternatively, if the consumer attempts to place the food container in a cup-holder, the rectangular base of the food container forces the consumer to place

the container in the cup-holder at an acute angle, also resulting the food being spilled.

Accordingly, what is needed is a food container which allows for a consumer to place the food container down without spilling the contents of the  
5 food container.

What is further needed is a food container which can be used with conventional forms of condiments. What is also needed is a food container which can be used with a cup holder.

### **Summary of the Invention**

10 A food container is provided which includes a generally cylindrical structure extending from a top end to a bottom end. The cylindrical structure is defined in part an outer side surface. The bottom end of the cylindrical structure has a substantially circular base for use with a cup holder. A condiment holder is disposed on the outer side surface of the generally cylindrical structure, such that  
15 a user has simultaneous access to contents disposed within the cylindrical structure and condiments disposed in the condiment holder.

The condiment holder optionally includes a condiment panel with a cutout. The condiment panel is partially surrounded by perforated edges. In one embodiment, the condiment holder is foldably coupled with the cylindrical  
20 structure, optionally, at a fold line which is offset from the top end of the cylindrical structure.

A food container is provided which includes a generally cylindrical structure extending from a top end to a bottom end. The cylindrical structure is defined in part an outer side surface. The bottom end of the cylindrical structure  
25 has a substantially circular base for use with a cup holder. A condiment holder is foldably coupled with the outer side surface of the generally cylindrical structure, such that a user has simultaneous access to contents disposed within the cylindrical structure and condiments disposed in the condiment holder.

The condiment holder optionally includes a condiment panel with a cut  
30 out. The condiment panel is partially surrounded by perforated edges. In one

embodiment, the condiment holder is foldably coupled with the cylindrical structure such that the fold line is offset from the top end of the cylindrical structure.

5 A food container is provided which includes a generally cylindrical structure extending from a top end to a bottom end. The cylindrical structure is defined in part an outer side surface. The cylindrical structure is formed of a plurality of paperboard panels which comprise the outer side surface and the bottom end. The bottom end of the cylindrical structure has a substantially circular base for use with a cup holder.

10 Optionally, the food container including paperboard panels further includes a condiment holder disposed on the outer side surface of the generally cylindrical structure. During use, a user has simultaneous access to contents disposed within the cylindrical structure and condiments disposed in the condiment holder. The condiment panel is optionally foldably coupled with the  
15 cylindrical structure. Further, the bottom end of the food container includes two overlapping bottom panels, where at least one of the bottom panels includes a tab which engages a cut out of the cylindrical structure. In another option, the bottom end has a hexagonal cross section.

A blank for forming a food container includes a front panel with a front  
20 panel side edge and a front panel bottom edge. The front panel is hingedly coupled with a back panel, which includes a back panel side edge and a back panel bottom edge. The front panel and the back panel each include bottom panels foldably coupled thereto.

These and other embodiments, aspects, advantages, and features of the  
25 present invention will be set forth in part in the description which follows, and in part will become apparent to those skilled in the art by reference to the following description of the invention and referenced drawings or by practice of the invention. The aspects, advantages, and features of the invention are realized and attained by means of the instrumentalities, procedures, and combinations  
30 particularly pointed out in the appended claims and their equivalents.

**Brief Description of the Drawings**

- Figure 1A is a plan view illustrating a blank for forming a food container constructed in accordance with one embodiment.
- 5 Figure 1B is a plan view illustrating a blank for forming a food container constructed in accordance with one embodiment.
- Figure 1C is a plan view illustrating a blank for forming a food container constructed in accordance with one embodiment.
- 10 Figure 2 is a first side elevational view illustrating a food container constructed in accordance with one embodiment.
- Figure 3 is a second side elevational view illustrating a food container constructed in accordance with one embodiment.
- 15 Figure 4 is a bottom plan view illustrating a food container constructed in accordance with one embodiment.
- Figure 5 is a top plan view illustrating a food container constructed in accordance with one embodiment.
- 20 Figure 6 is a side elevational view illustrating a food container constructed in accordance with another embodiment.
- Figure 7 is a side elevational view illustrating a food container constructed in accordance with another embodiment.
- 25 Figure 8 is a side elevational view illustrating a food container constructed in accordance with another embodiment.
- Figure 9 is a side elevational view illustrating a food container constructed in accordance with another embodiment.
- 30 Figure 10 is a side elevational view illustrating a food container constructed in accordance with another embodiment.

### **Description of the Embodiments**

In the following detailed description, reference is made to the  
5 accompanying drawings which form a part hereof, and in which is shown by  
way of illustration specific embodiments in which the invention may be  
practiced. These embodiments are described in sufficient detail to enable those  
skilled in the art to practice the invention, and it is to be understood that other  
embodiments may be utilized and that structural changes may be made without  
10 departing from the scope of the present invention. Therefore, the following  
detailed description is not to be taken in a limiting sense, and the scope of the  
present invention is defined by the appended claims and their equivalents.

A blank 100 for a food container (Figures 2 - 10) is illustrated in Figure  
1A. The blank 100 includes a front panel 110 which is defined in part by an  
15 inner surface 112 and an outer surface 114. The blank 100 is formed of a  
plurality of paperboard panels. The front panel 110 is further defined by a top  
edge 116 and a bottom edge 118. Disposed along the bottom edge 118 are  
container feet 120. The front panel 110 is further defined by a first side edge  
122 and a second side edge 124, where a back panel 140 is hingedly coupled  
20 with the second side edge 124.

A first bottom panel 126 is hingedly coupled along a bottom panel fold  
line 136 which is offset from the bottom edge 118 of the front panel 110.  
Optionally, the first bottom panel 126 has a generally hexagonal shape and/or  
folding panels 128, 130. The first and second folding panels 128, 130 are  
25 hingedly coupled with the first bottom panel 126. The first and second folding  
panels 128, 130 beneficially assist to stiffen first bottom panel 126 and also  
prevent granular portions from falling out the the food container. The first  
bottom panel 126 further includes a tab 132 which extends from an edge 134 of  
the first bottom panel 126.

The back panel 140 is defined by a top edge 142, a bottom edge 144, a first side edge 146, and a second side edge 148. The back panel 140 is hingedly coupled with the front panel 110 such that the first side edge 146 of the back panel 140 is disposed adjacent to the second side edge 124 of the front panel 110. The back panel 140 has a glue panel 150 hingedly coupled thereto along the second side edge 148. The glue panel 150 is coupled with a surface of the front panel 110, for instance, the inner surface 112 of the front panel 110, as will be described in further detail below. Alternatively, the glue panel 150 is hingedly coupled with the front panel 110 and is attached to a surface of the back panel 140, such as a back panel outer surface (Figure 1B).

The back panel 140 includes a center back panel 152, a first side back panel 154, and a second side back panel 156. The first side back panel 154 is hingedly coupled with the center back panel 152 along a first fold line 160. The second side back panel 156 is hingedly coupled with the center back panel 152 along a second fold line 158, where the center back panel 152 is disposed between the first side back panel 154 and the second side back panel 156.

Disposed along a bottom panel fold line 162 of the back panel 140 is a second bottom panel 164, where the bottom panel fold line 162 is offset from the bottom edge 144 of the back panel 140. The second bottom panel 164 includes a glue panel 166 which is hingedly coupled with the second bottom panel 164. The glue panel 166 allows for the second bottom panel 164 to be coupled with the first bottom panel 126, as discussed further below. Disposed between the second bottom panel 164 and the center back panel 152 is a cut out 168. The cut out 168 is adapted to receive therein the tab 132 of the first bottom panel 126. Disposed adjacent to the cut out 168 on the center back panel 152 is a vertical cut line 163. The vertical cut line 163 allows for the cut out 168 to expand as the tab 132 is being received therein.

The center back panel 152 also includes a condiment holder fold line 170, where the center back panel 152 is defined by the first fold line 158, the second fold line 160, the bottom panel fold line 162, and the condiment holder



fold line 170. A condiment holder 172 is hingedly coupled with the center back panel 152 of the back panel 140 along the condiment holder fold line 170. The condiment holder 172 includes a center panel 176 and a condiment panel 174. With the exception of the condiment holder fold line 170, the condiment panel 174 is surrounded by perforated line 177. In addition, the center panel 176 is surrounded in part by the condiment panel 174, and separated therebetween by a perforated line 178.

To form the container 200, as illustrated in Figures 2 and 3, from the blank 100 of Figure 1A, the glue panel 166 of the second bottom panel 164 is folded at 162 and coupled with a bottom surface of the first bottom panel 126. The glue panel 166 can be secured using a number of manners including, but not limited to, adhesive, mechanical fasteners, etc. The glue panel 150, which is coupled with the second side edge 148 of the back panel 140, is coupled with the inner surface 112 of the front panel 110. As discussed above, the glue panel 150 can be hingedly coupled with the front panel 110, and for either, can be coupled with either the inner surface or the outer surface of the front or back panels 110, 140. The glue panel 150 can be secured using a number of manners including, but not limited to, adhesive, mechanical fasteners, etc. Optionally, the glue panel 166, the second bottom panel, and the first bottom panel 126 are folded up inside of the container 200, as shown in Figures 2 and 3.

Force is applied at 205 to the first side edge 122, the second side edge 148, and the second side edge 124, and first side edge 146. As the force is applied at 205, the container 200 opens such that a bottom end 210 of the container 200 has a generally circular base, as shown in Figure 4. Optionally, the bottom end 210 has a hexagonal shape to form the generally circular base. The number of panels and fold lines for the front panel 110 and/or the back panel 140 can be varied to form the generally circular base. In another alternative, the bottom end 210 has a substantially oval base (Figure 1C). The container 200 is fully erected by pressing inwardly at 205, and it is not necessary to apply additional force to the bottom panels.

The front panel 110 and back panel 140 curve to form a generally cylindrical structure 212, which optionally includes generally conical structures. The first bottom panel 126 is pulled by the second panel 164 toward the bottom end 210 of the container 200. The tab 132 is inserted into the cut out 168, such  
5 that the tab 132 is secured within the cut out 168, and the first bottom panel 126 is secured to the back panel 140. Thus, the first bottom panel 126 is hingedly coupled with the front panel 110, is secured to the back panel 140 by the tab 132, and is further supported by the second bottom panel 164. The container 200 has a generally cylindrical structure having an outer side surface 214 and a  
10 bottom end 210. Contents disposed within the container 200 are supported by first and second bottom panels 126, 164, as well as front panel 110 and back panel 140, as shown in Figures 6 and 7.

A condiment holder 230 is coupled with the outer side surface 214 such that the user has simultaneous access to both the container 200 and the  
15 condiment holder 230. Optionally, the condiment holder 230 is foldably coupled with the outer side surface 214. For instance, to form the condiment holder 230, the condiment panel 174 is removed from the perforated line 177. The condiment panel 174 and the center panel 176 are folded away from the back panel 140 toward the outer side surface 214, such that a cut out 232 is  
20 formed in the back panel 140, as shown in Figure 8. The center panel 176 is removed from the perforated line 178 and folded further toward the outer side surface 214, as shown in Figure 9. The removal of the center panel 176 forms an opening 234 in the condiment panel 174, such that a tub of condiment 240 can be disposed therethrough, as shown in Figure 10. Optionally, the center  
25 panel 176 remains in a vertical position and the condiment panel 174 is folded down. This would assist in preventing food from exiting the food container 200.

Advantageously, the structure of the food container allows for it to be used conveniently in a cup holder, for instance, in an automobile. The  
30 condiment holder further allows a consumer to use the food container without

having to separately hold or fumble with a condiment. In addition, the condiment is held by the food container, and does not prevent the food container from being used in the cup holder.

It is to be understood that the above description is intended to be  
5 illustrative, and not restrictive. Many other embodiments will be apparent to those of skill in the art upon reading and understanding the above description. The scope of the invention should, therefore, be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled.

10

What is claimed is:

1. A food container comprising:  
a generally cylindrical structure extending from a top end to a bottom  
end and defined in part an outer side surface;  
5 the bottom end having a substantially circular base for use with a cup  
holder;  
a condiment holder disposed on the outer side surface of the generally  
cylindrical structure; and  
where a user has simultaneous access to contents disposed within the  
10 cylindrical structure and condiments disposed in the condiment holder.
2. The food container as recited in claim 1, wherein the condiment holder  
comprises a condiment panel having a cut out therein, wherein the condiment  
panel is adapted to receive a condiment therethrough.  
15
3. The food container as recited in claim 2, wherein the condiment panel is  
partially surrounded by perforated edges.
4. The food container as recited in claim 2, wherein the condiment panel is  
20 foldably coupled with the cylindrical structure.
5. The food container as recited in claim 4, wherein the condiment panel is  
foldably coupled with the cylindrical structure at a fold line which is offset from  
the top end of the cylindrical structure.  
25
6. The food container as recited in claim 1, wherein the bottom end  
includes two overlapping bottom panels.

7. The food container as recited in claim 6, wherein at least one of the bottom panels includes a tab which engages a cut out of the cylindrical structure.
- 5 8. The food container as recited in claim 1, wherein the bottom end has a hexagonal cross section.
9. The food container as recited in claim 1, wherein a cross section of the top end has a greater surface area than a cross section of the bottom end.
- 10 10. The food container as recited in claim 1, further comprising a tub of condiment disposed within the condiment holder.
11. A food container comprising:
- 15 a generally cylindrical structure extending from a top end to a bottom end and defined in part an outer side surface;  
the bottom end having a substantially circular base for use with a cup holder;  
a condiment holder foldably coupled with the outer side surface of the
- 20 generally cylindrical structure; and  
where a user has simultaneous access to contents disposed within the cylindrical structure and condiments disposed in the condiment holder.
12. The food container as recited in claim 11, wherein the condiment holder
- 25 comprises a condiment panel having a cut out therein, wherein the condiment panel is adapted to receive a condiment therethrough.
13. The food container as recited in claim 12, wherein the condiment panel is partially surrounded by perforated edges.

30

14. The food container as recited in claim 11, wherein the condiment holder is foldably coupled with the cylindrical structure at a fold line which is offset from the top end of the cylindrical structure.
- 5 15. The food container as recited in claim 11, wherein the bottom end includes two overlapping bottom panels.
16. The food container as recited in claim 15, wherein at least one of the bottom panels includes a tab which engages a cut out of the cylindrical  
10 structure.
17. The food container as recited in claim 11, wherein the bottom end has a hexagonal cross section.
- 15 18. The food container as recited in claim 11, wherein a cross section of the top end has a greater surface area than a cross section of the bottom end.
19. The food container as recited in claim 11, further comprising a tub of condiment disposed within the condiment holder.  
20
20. A blank comprising:  
a front panel defined in part by a front panel side edge and a front panel bottom edge;  
a first bottom panel foldably coupled with the front panel along a first  
25 bottom panel fold line;  
a back panel defined in part by a back panel side edge and a back panel bottom edge;  
the back panel hingedly coupled to the front panel, where the back panel side edge is coupled with the front panel side edge;

a second bottom panel foldably coupled with the back panel along a second bottom panel fold line; and

wherein the blank is formable into a food container having a generally circular base.

5

21. The blank as recited in claim 20, wherein the first bottom panel fold line is offset from the front panel bottom edge.

22. The blank as recited in claim 20, wherein the second bottom panel fold  
10 line is offset from the back panel bottom edge.

23. The blank as recited in claim 20, wherein the first bottom panel includes a tab, the blank includes a cut out disposed between the second bottom panel and the back panel.

15

24. The blank as recited in claim 20, further comprising a condiment holder coupled with the back panel.

25. The blank as recited in claim 24, wherein the condiment holder includes  
20 a condiment panel coupled with the back panel along a perforated line.

26. A food container comprising:  
a generally cylindrical structure extending from a top end to a bottom end and defined in part an outer side surface;  
25 the generally cylindrical structure including a plurality of paperboard panels forming the outer side surface and the bottom end; and  
the bottom end having a substantially circular base for use with a cup holder.

30 27. The food container as recited in claim 26, further comprising:

a condiment holder disposed on the outer side surface of the generally cylindrical structure; and

where a user has simultaneous access to contents disposed within the cylindrical structure and condiments disposed in the condiment holder.

5

28. The food container as recited in claim 27, wherein the condiment panel is foldably coupled with the cylindrical structure.

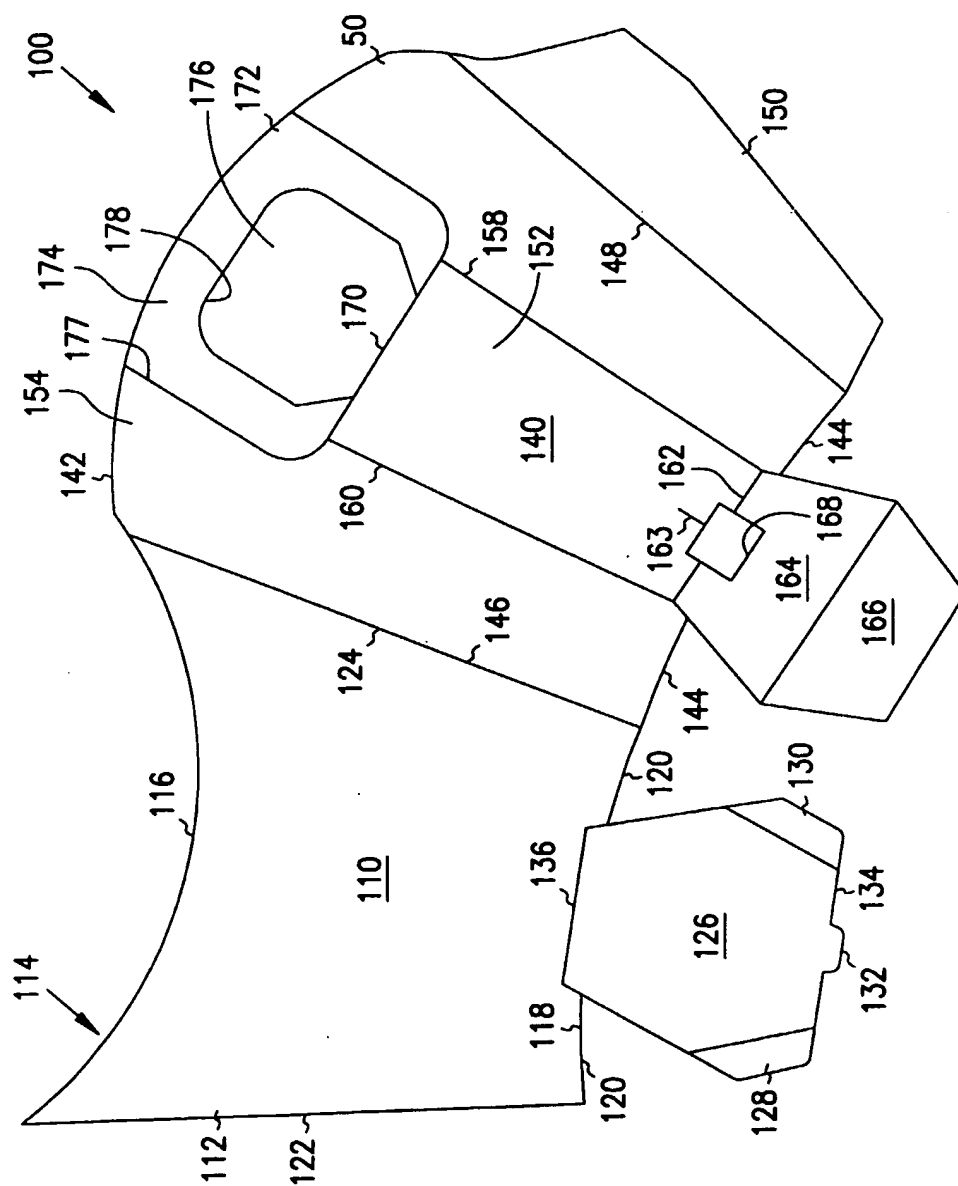
29. The food container as recited in claim 26, wherein the bottom end  
10 includes two overlapping bottom panels.

30. The food container as recited in claim 29, wherein at least one of the bottom panels includes a tab which engages a cut out of the cylindrical structure.

15

31. The food container as recited in claim 26, wherein the bottom end has a hexagonal cross section.





**FIG. 1A**

2/8

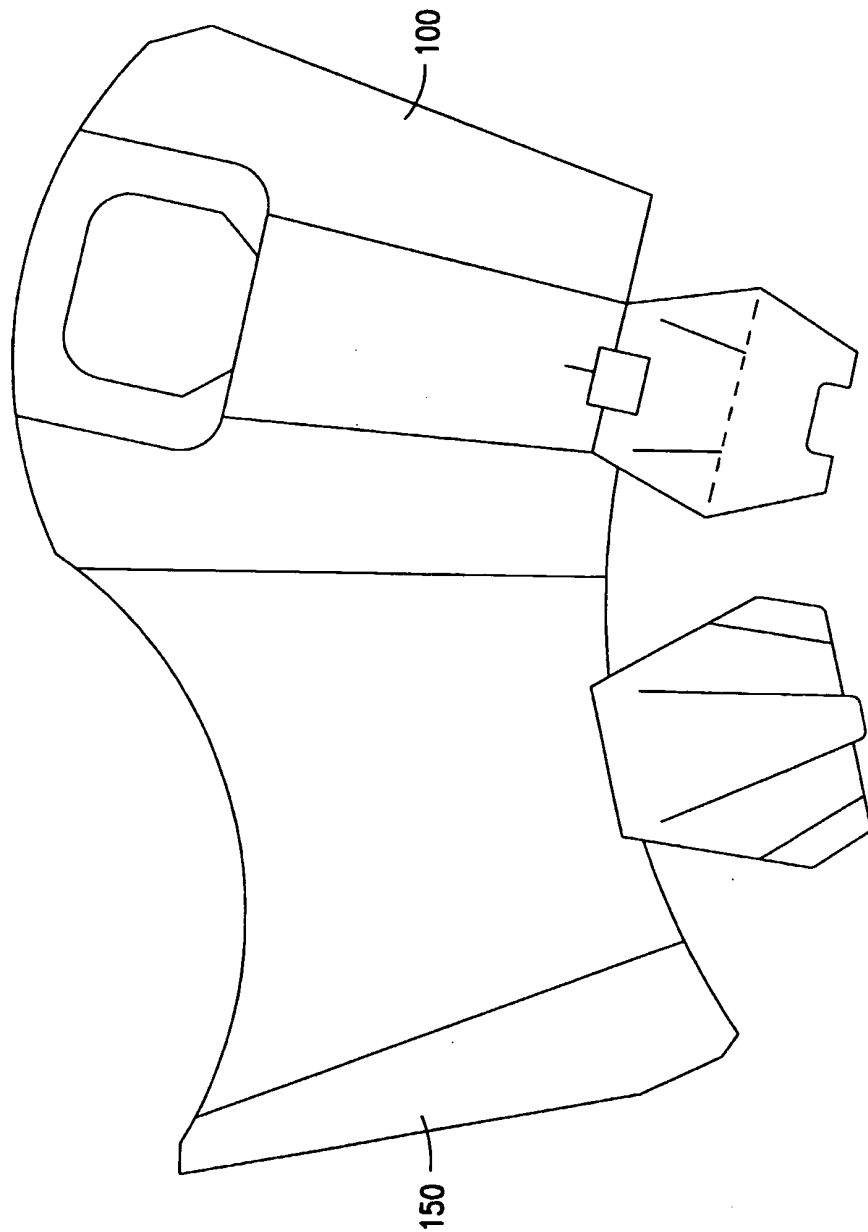


FIG. 1B

3/8

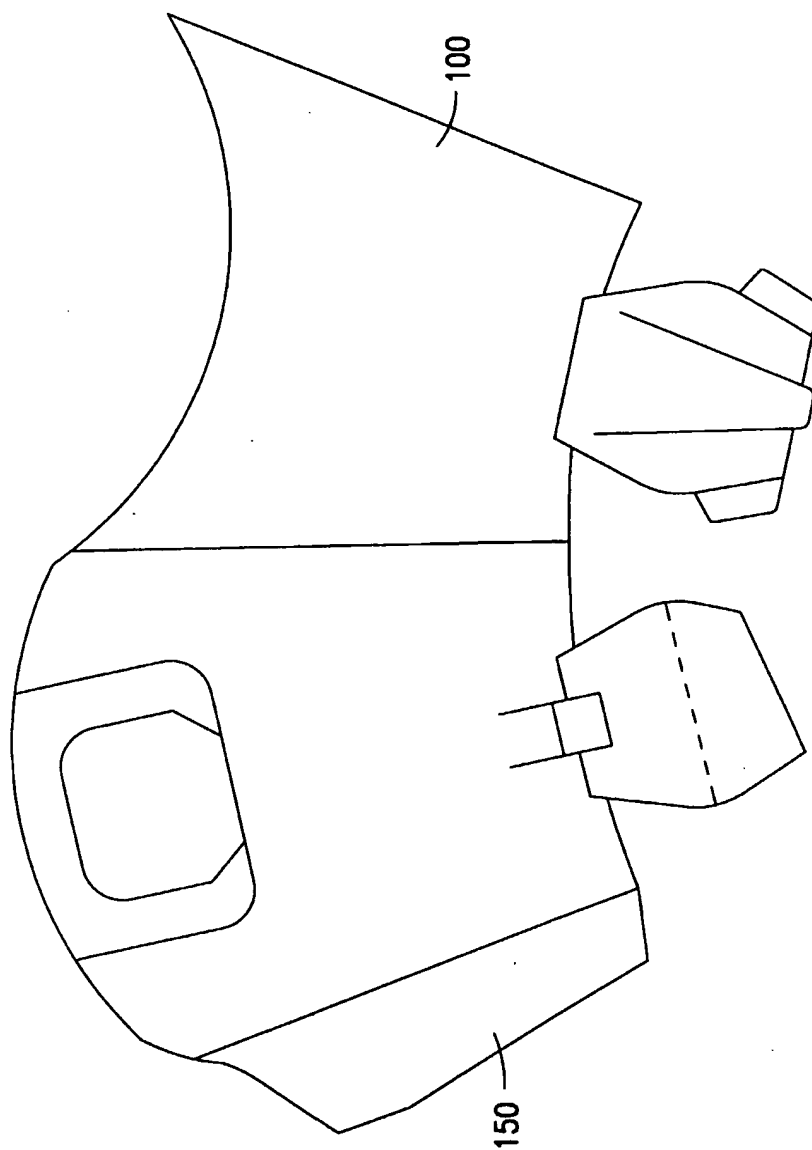


FIG. 1C

4/8

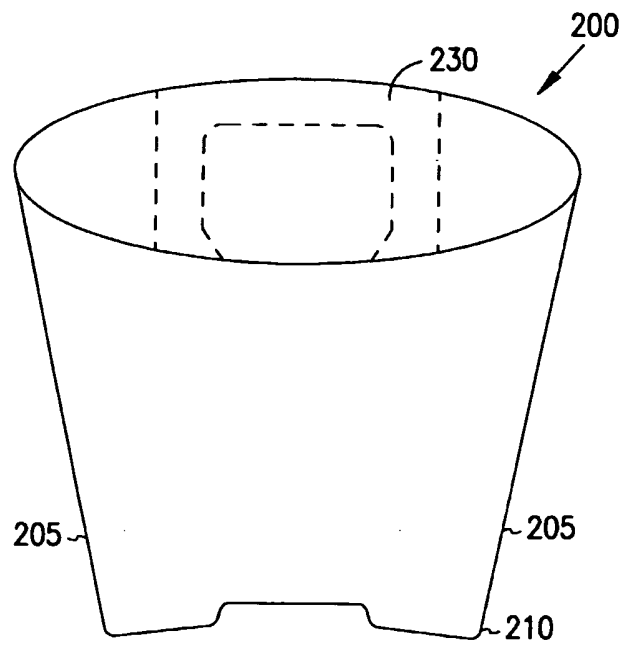


FIG. 2

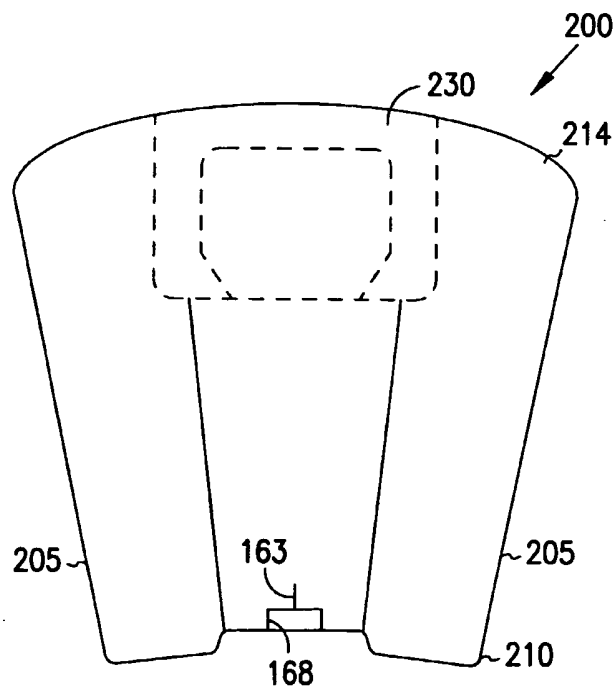


FIG. 3

5/8

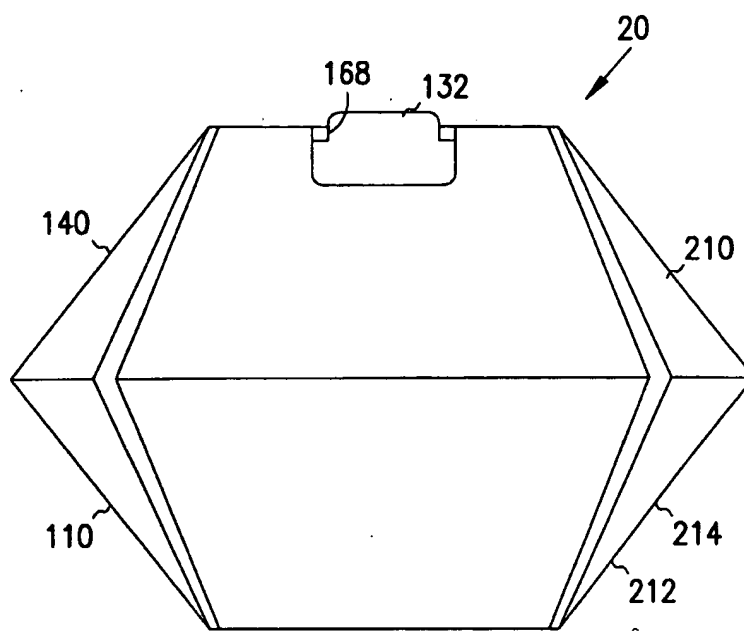


FIG. 4

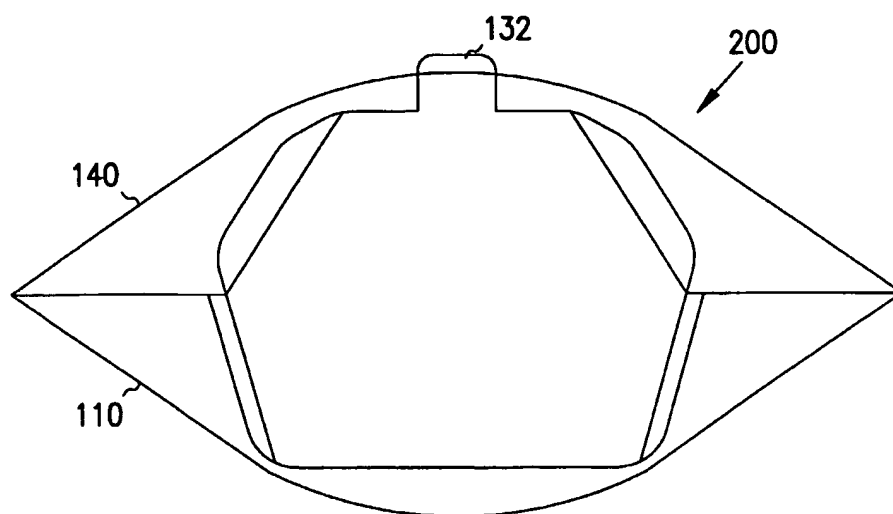


FIG. 5

6/8

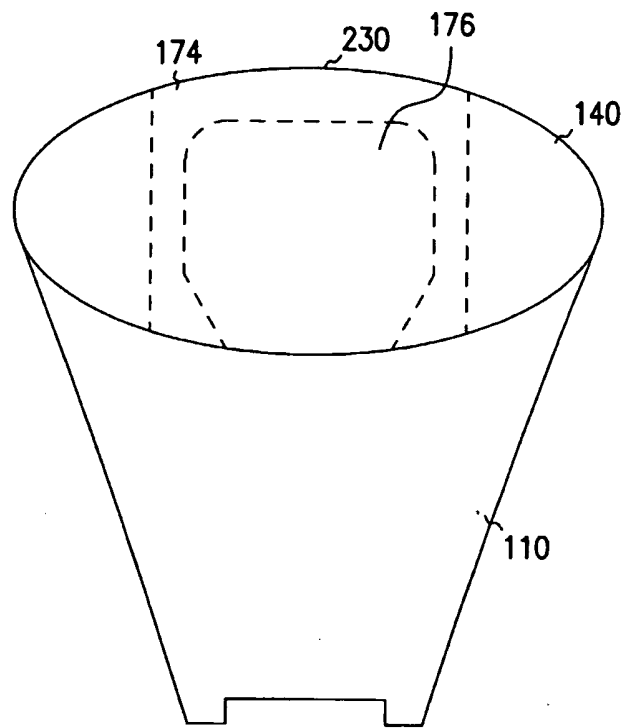


FIG. 6

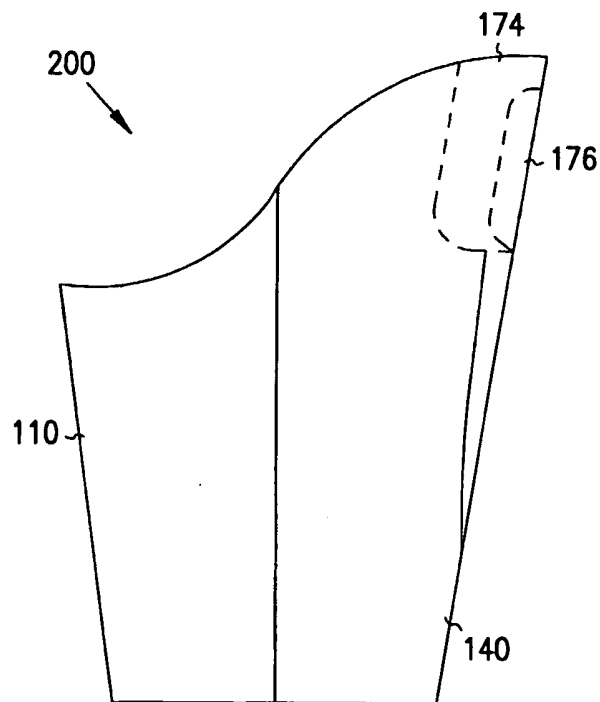


FIG. 7

7/8

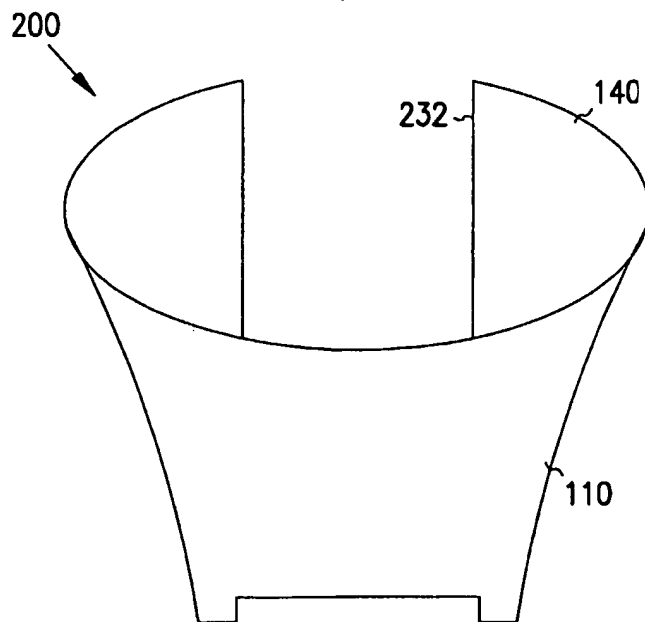


FIG. 8

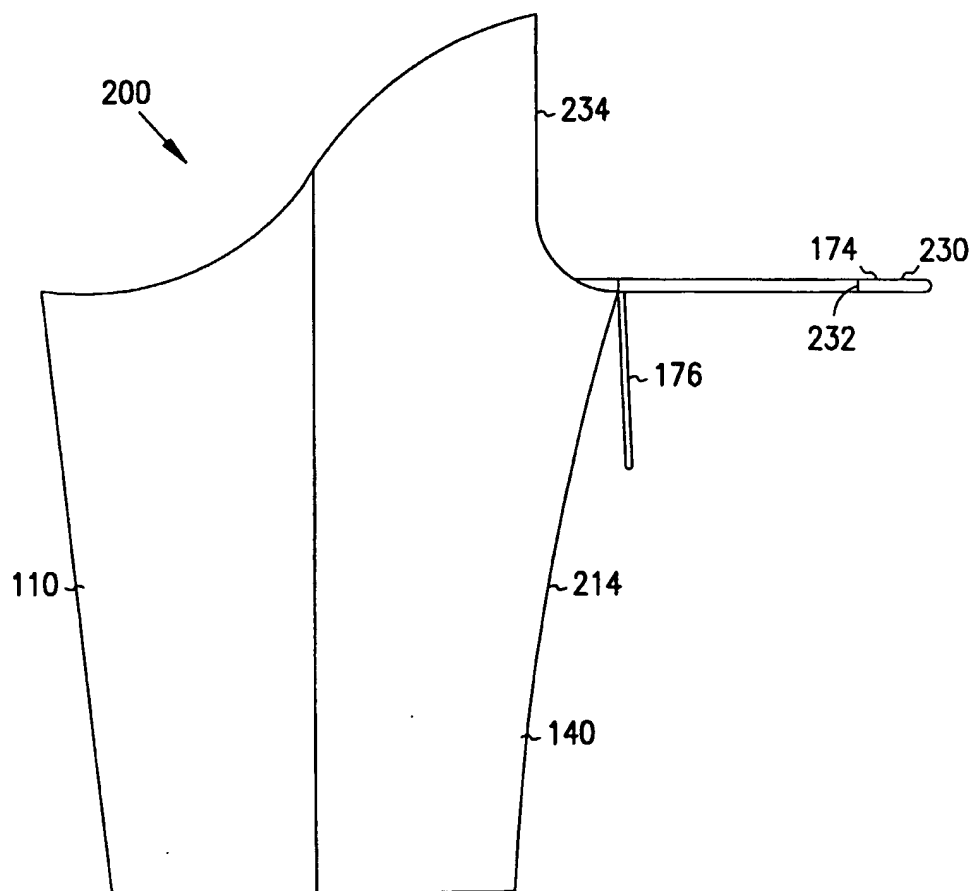


FIG. 9

8/8

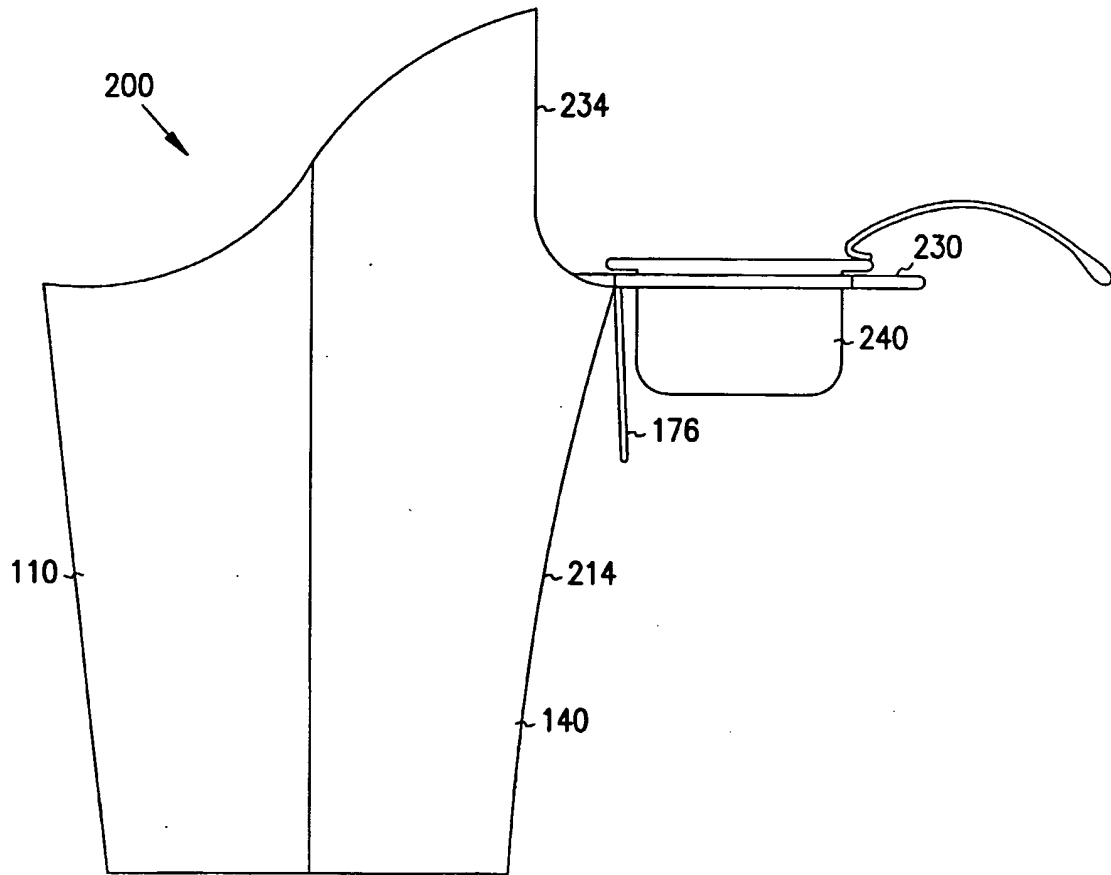


FIG. 10